REVISIONS This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR. DATE APPROVED REV ECR DESCRIPTION INITIAL CH'D TITLEBLOCK AND REVISION BLOCK. 8/3/2009 В CH'D T/N FROM AN8514-1, CH'D ENGRAVE NOTES. 8/3/2009 RJC RW ARM & -2 ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D. ADDED ASSY VIEW AND TABLE SHEET 4. C 1/10/2011 RJC SE UPDATED TO NEW STANDARDS. ADDED USED ON MODELS TO ALL DWG SHEETS. DELETED NOTES 1 & 2 SHEET 1. -2 CH'D MAT'L WAS 4140 IS 4140/4142, ADDED MISSING DIM'S 2X R.010 MAX. .14 & .10, .18, CH'D DIMS WAS .384-.379 IS 2X .383-.378. DELETED .024 X 45°, -3 CH'D MAT'L WAS 4140 Q&T IS 4140/4142 Q&T, CH'D DIM WAS .090 IS .09, WAS R.025 IS R.03. -4 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, .29, -7 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, R.31. 4 16-0046 3/1/2016 RJC JAG

> NOTE: REF. BELL T/N AN8514-1.



ÄDJUSTABLE SPANNER WRENCH

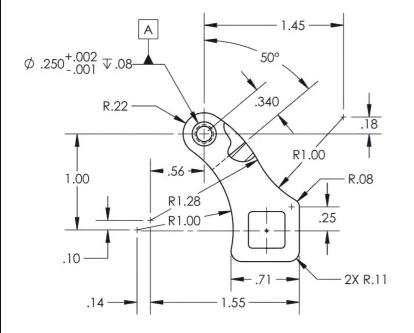
DWG NO.

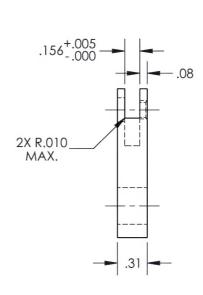
RB AN8514-1

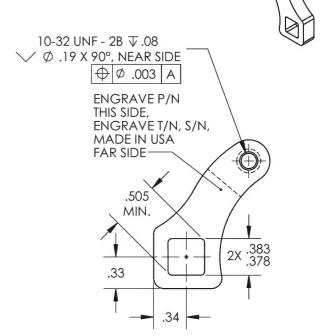
14-1 REV 4

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.	HEAT TREAT FINISH		DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125/
			-2	1	HANDLE	4140/4142		2	SPEC		1. BREAK ALL SHARP EDGES
			-3	1	BOLT	4140/4142 Q & T		3	DRAWN B	OOLL	.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY
			-	<u> </u>				-	CHECKED	DUERFELDT	AFTER PLATING
			-4	'	ARM	4140/4142		4	OPPS APP	R: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
			-5	1	ARM	4140/4142		4	QA APPR:	LINDSAY	USED ON MODEL
			-6	1	ARM	4140/4142		4	APPROVE	D: GILBERT	BELL 212, 230, 407, 412, 430
			-7	1	ARM	4140/4142		5	SCALE	1:1 DATE	6/26/2000 SHEET 1 OF 5

	REVISIONS REVISIONS								
REV	ECR	DATE	INITIAL	APPROVED					
В		CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW				
С		-2 ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D.	1/10/2011	RJC	SE				
4	16-0046	-2 CH'D MAT'L WAS 4140 IS 4140/4142, ADDED MISSING DIM'S 2X R.010 MAX14 & .10, .18, CH'D DIMS WAS .384379 IS 2X .383378. DELETED .024 X 45°.	3/1/2016	RJC	JAG				









ÄDJUSTABLE SPANNER WRENCH

RB AN8514-1-2 4 MAT'L 4140/4142 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX + .01 ANGLES ± .5°

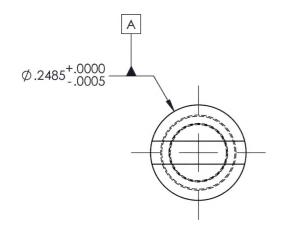
.X ± .1 SURFACES = 125/ HEAT RC 22-32
TREAT BLACK OXIDE SPEC QMSI-6.2.2 REV D 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: COLE CHECKED: DUERFELDT OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT BELL 212, 230, 407, 412, 430 SCALE 6/26/2000 SHEET 2 OF 5 1:1

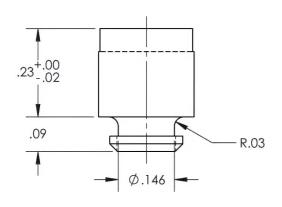


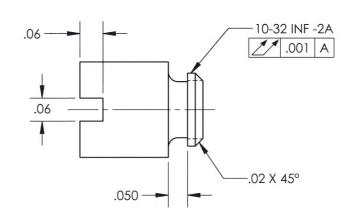
HANDLE

	REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
4	16-0046	-3 CH'D MAT'L WAS 4140 Q&T IS 4140/4142 Q&T, CH'D DIM WAS .090 IS .09, WAS R.025 IS R.03.	3/1/2016	RJC	JAG		











ÄDJUSTABLE SPANNER WRENCH

4

SHEET 3 OF 5

RB AN8514-1-3 MAT'L 4140/4142 Q & T UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX + .01 ANGLES ± .5°

.X ± .1 SURFACES = 125/ HEAT TREAT FINISH BLACK OXIDE SPEC QMSI-6.2.2 REV D 1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: COLE CHECKED: DUERFELDT OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT BELL 212, 230, 407, 412, 430

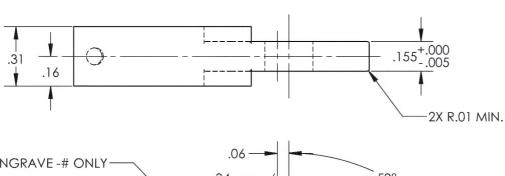
6/26/2000

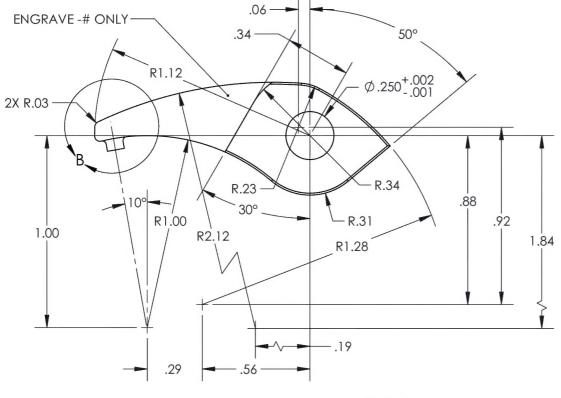
SCALE

4:1

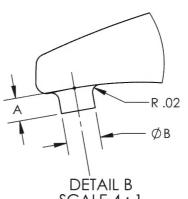
BOLT

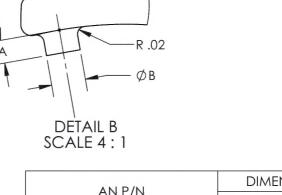
T	REVISIONS REVISIONS									
	REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				
	В		CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW				
	С		ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D. ADDED TABLE,	1/10/2011	RJC	SE				
	4	16-0046	-4 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, .29.	3/1/2016	RJC	JAG				





ARM





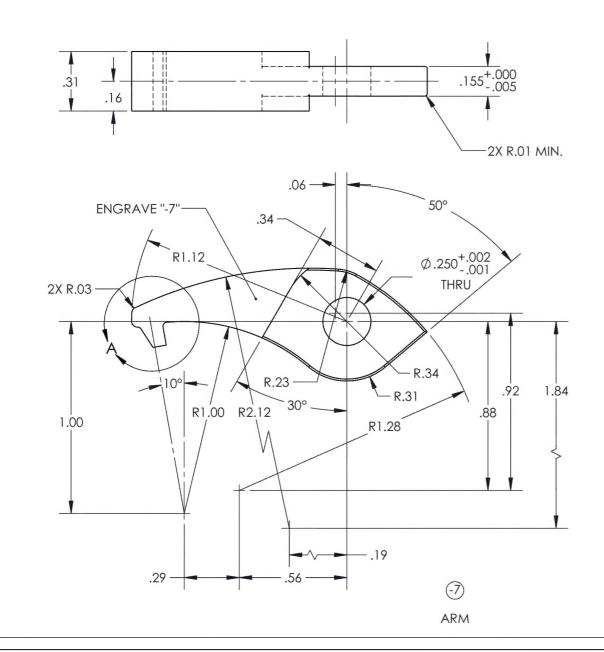
AN	DIMENSION				
AN	A ±.005	Ø B ±.003			
RB AN8514-4	.09 PIN ARM	ARM .060			
RB AN8514-5	.12 PIN ARM	.120	.121		
RB AN8514-6	.190	.183			

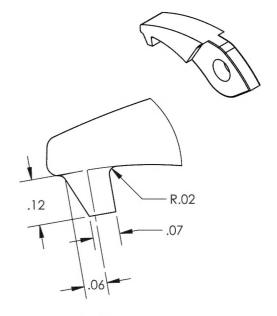


ADJUSTABLE SPANNER WRENCH

	/ (B3001) (BEE 01) (I TI TER TTREET OFF									
DWG NO.	F	B AN	514-1-	4	4					
MAT'L 4140/4	142				S OTHERWISE SPECIF					
HEAT TREAT RC 22	-32			.xxx ± .005	NSIONS ARE IN INCHE FRACTIONS ± 1/8	:5				
	(OXIDE			.XX ± .01	ANGLES ±.5° SURFACES = 1	125/				
SPEC QMSI-	6.2.2 REV D			1. BREAK ALL	L SHARP EDGES	V				
DRAWN BY:	COLE DUERFELDT ANDERSON LINDSAY GILBERT			.015 x 45° C	OR .015R NAL LIMITS APPLY					
CHECKED:				AFTER PLA						
OPPS APPR:				ASME Y14.						
QA APPR:				USED ON MODEL						
APPROVED:				BELL 21	, 430					
SCALE	2:1	DATE (3/2	6/2000	SHEET 4 OF	5				

	REVISIONS REVISIONS									
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED					
В		CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW					
С		ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D.	1/10/2011	RJC	SE					
4	16-0046	-7 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, R.31.	3/1/2016	RJC	JAG					





DETAIL A SCALE 4 : 1

NOTE: USE DXF.



ADJUSTABLE SPANNER WRENCH

DWG NO.	F	RB A	8	3514-1-	7	4	
MAT'L 4140/4	142				S OTHERWISE SPECIFI		
HEAT RC 22-	-32			.XXX ± .005		5	
EINII OILI	OXIDE			.XX ± .01	ANGLES ±.5° SURFACES = 12	125/	
SPEC QMSI-	SPEC QMSI-6.2.2 REV D				L SHARP EDGES	7	
DRAWN BY:	COLE			.015 x 45° C	OR .015R NAL LIMITS APPLY		
CHECKED:	DUERFE	LDT		AFTER PLA	TING		
OPPS APPR:	ANDERS	SON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL			
QA APPR:	LINDSAY	′					
APPROVED:	GILBERT			BELL 21	2, 230, 407, 412,	430	
SCALE	2·1	DATE	6/2	26/2000	SHEET 5 OF	5	